by an accurately directed sting. But it seems wholly unreasonable to pretend that by chance or experiment the worm could have acquired its marvellous skill in dissection, or that a complicated chain of events, affecting the behaviour of two generations, could have been elaborated by casual or tentative experience. The fascinating pages of M. Fabre support this illustration by hosts of others, which show that, even if habits may in some cases be inherited, instinctive behaviour is too elaborate to have been derived from them. The various complexities of instinctive conduct must have originated in such mutations, or "sports,"[5] as have produced the different species of plants and animals. And, after all, its manifestations are not more wonderful than the instinctive functioning of our vital organs.

§

A nerve cell is sensitive to an impression and exhibits a reaction. The behaviour of a photographic plate under the action of light is, so far, precisely similar. But in the cell these processes appear to be attended by something that is lacking in the plate—by a feeling of "awareness" or "consciousness."[55] To some this will appear a monstrous hypothesis: it invests a nerve cell with attributes that are peculiar to the brain. But the brain is but a mass of nerve cells, and must derive its power from its

constituents. During sleep the brain is quiescent: if the finger of a sleeping person is pinched, it is sharply withdrawn although he is not awakened. This, it may be urged, is a purely automatic action, and does not prove that any awareness arose. But the pinch may move the sleeper to dream that a